

Mus_musculus	1	MRFREQLGGSAAIFGATLQACRLIWAFCALHGVIVVYISGRDLSRIPQLVGVSSSTL
Cricetulus_griseus	1	MRFLRPVLGGSAAIFGATLQACRLIWAFCALHGVIVVYISGRDLSRIPQLVGVSSSTL
Homo_sapiens	1	MRLREPLLSGSAAIFGASLQACRLIWAFCALHGVIVVYISGRDLSRIPQLVGVSTPL
Bos_taurus	1	MKPREPLLGSAAIFGASLQACRLIWAFCALHGVIVVYISGRDLSRIPQLVGVHPPL
Gallus_gallus	1	-----MKEPAIFGTSLQACRLIWAFCALHGVIVVYISAGSSLTTPRSPEPPRRP
Homo_sapiens_B4GALT2	1	-----MSRLGGTILERVCKAKILCLIHFLVATILFDVYAQHLAFFSRFSARGP
Xenopus_laevis	1	-----MRRVLERPCTLAHLGFGQFAFVYFSSGGLRSLAFIFGR-----
Homo_sapiens_B4GALT3	1	-----LRLRLERPCTLAHLGGSQAVMYISLGGFRSLSAIFGR-----
Homo_sapiens_B4GALT4	1	-----MCFNLTFHLSYKFRLLILTLCLTVGWATSNYFVGAIQ-----
Ciona_intestinalis	1	MSLRHQYNKGLVKRRNTNYGLRAKWLITCILFAHEVIVYRIHDVILVLSLHNLKLD
Homo_sapiens_B4GALT6	1	-----MSVRRMRMRVSNRSLAFVFFFSISSCTVIVYVAPGIANTYLFMQAQG
Homo_sapiens_B4GALT5	1	-----MRARRCLRLPRSLIAAFVFFFSISSCTVIVYVAPGIVNTYLFMQAQG
Homo_sapiens_B4GALT7	1	-----MFPSSRRKIAQIPWEDGRSGLEGGGLPRKCSVTHIFVACLIS-----

Mus_musculus	61	QGGTN----GAAASKQPPGEQPRGARPPPELGVSPKIPGLDSSPGAAIGPGLKSN---
Cricetulus_griseus	61	RSGTI----GATANKQP-----GARPPPEVGVSPKIPGPDSPGTAFDPGLKSN---
Homo_sapiens	61	QGGSN----SAAAIQSSGELRTGGARPPPELGASQPRPGDSSPVVDIGPFPASN---
Bos_taurus	61	QGSSH----GAAAIQPSGELRLRGVAPPPPELQNSAPPSRAPSNLDAYHPGPGPGPGS
Gallus_gallus	53	PPANL-----SLPP-----SRPEPPPAARAPPGPVSAQPRNLPDSAPSG---
Homo_sapiens_B4GALT2	51	AHALHPAAS-----SSSSSSNCIENATASSGSLPEVPVSALPGP---
Xenopus_laevis	41	-----SSEESFDYHRTIDVYSNLSLVNIMVPPSTE---
Homo_sapiens_B4GALT3	41	-----DQGETFDYSHTIDVYSNLSHLP-GAPGGFP---
Homo_sapiens_B4GALT4	40	-----EIPKAKEFMANFHKTLILGKGLITNEAST---
Ciona_intestinalis	60	-----WIRGLETNCEAVPGHNSLKDSRALLNGGEN---
Homo_sapiens_B4GALT6	51	IMLRNVKTIG-----HMIRLYTNKNSTLNGTDYPEGNSSDYLVQTTIYLPENFT---
Homo_sapiens_B4GALT5	51	ILIRDNVRTTGAQVYEQVLRSAAYAKRNSSVNDSDYPLDLNHSEFLQTTIFLPEDFT---
Homo_sapiens_B4GALT7	41	-----LGFFLLWLQLSCSGDVARAVRQGGQ---

Mus_musculus	114	LSSLVPVPTTTGLLSLEACPESPELLVGPMLDFN--IADLLAKKNDEIKTCGRVSPK
Cricetulus_griseus	108	WTSVLVPPTTALLTLPACPESPELLVGPMLDFN--IADLLAKKNDEIKMGCRYSPK
Homo_sapiens	114	LTSVPVPHTTALS-LEACPESPELLVGPMLDFN--MPDLLAKKNDEIKMGCRYAPR
Bos_taurus	117	NLTSAPVPTTTRSLTACPESPELLVGPMLDFN--IPVDLKLKQKNPKVKIKGGRYTTP
Gallus_gallus	92	-----LCETPEPELLVGPMLDFN--QPYNLEASTNPEVREGGRAPK
Homo_sapiens_B4GALT2	90	-----TAPTLPPEPESPELLVGPMLDFN--SPYPLERQRENPEVLMGGRYTTP
Xenopus_laevis	71	-----EDTLERCFORSEPYLVGPMLDFN--QITLRETHKNELVFKGGEYKPP
Homo_sapiens_B4GALT3	70	-----APQGLEPCPESPELLVGPMLDFN--PVPSLAETVERNERVEPGCRYPA
Homo_sapiens_B4GALT4	70	-----KKVBIDNCPEVSEYLRQSKKIPK--PDITLPEQAENPKVSRG-RYRPO
Ciona_intestinalis	90	-----ASPLPFCPEMPEMLGKQKQGNED-EDSLDEVKNYTIVPEGGRKPEA
Homo_sapiens_B4GALT6	102	-----YSPYLPCEKLEPYRQGFENNVSEVSFDEHQFSKDLDEPGGHYRPEK
Homo_sapiens_B4GALT5	108	-----YFANHTEPERLESIMKGPEDNMSEIGMDYTHEFASKDITFKLGGHAKES
Homo_sapiens_B4GALT7	67	-----ETSGPPRACPEPPPEPEHDEED

Mus_musculus	172	DCVSPHKVAILIPFRNRBEHLRYLYYLHPILQRCQOLDYGIYVINQAGDTMFNRAKLLNV
Cricetulus_griseus	166	DCISPHKVAILIPFRNRBEHLRYLYYLHPILQRCQOLDYGIYVINQAGDTMFNRAKLLNV
Homo_sapiens	171	DCVSPHKVAILIPFRNRBEHLRYLYYLHPILQRCQOLDYGIYVINQAGDTMFNRAKLLNV
Bos_taurus	175	DCISPHKVAILIPFRNRBEHLRYLYYLHPILQRCQOLDYGIYVINQAGSMTFNRAKLLNV
Gallus_gallus	134	OCKALQKVAILIPFRNRBEHLRYLYYLHPILQRCQOLDYGIYVINQAGDEEFNRAKLLNV
Homo_sapiens_B4GALT2	138	DCTPAQTVAIIPFRNRBEHLRYLYYLHPILQRCQOLDYGIYVINQAGGDTFNRAKLLNV
Xenopus_laevis	119	NCEARNTAIIIPFRNRBEHLRYLYYLHPILQRCQOLDYGIYVINQAGNCTFNRAKLLNV
Homo_sapiens_B4GALT3	118	GCEPRSTAIIPFRNRBEHLRYLYYLHPILQRCQOLDYGIYVINQAGNCTFNRAKLLNV
Homo_sapiens_B4GALT4	117	OCKALQKVAILIPFRNRBEHLRYLYYLHPILQRCQOLDYGIYVINQAGGKFNRAKLLNV
Ciona_intestinalis	138	QCVPRHKVAILIPFRNRBEHLRYLYYLHPILQRCQOLDYGIYVINQAGTGTFNRAKLLNV
Homo_sapiens_B4GALT6	151	DCKPRWKVAILIPFRNRBEHLRYLYYLHPILQRCQOLDYGIYVINQAGTGTFNRAKLLNV
Homo_sapiens_B4GALT5	157	DCMFRWKVAILIPFRNRBEHLRYLYYLHPILQRCQOLDYGIYVINQAGTGTFNRAKLLNV
Homo_sapiens_B4GALT7	88	ASWGPHEANIPFRNRBEHLRYLYYLHPILQRCQOLDYGIYVINQAGTGTFNRAKLLNV

Mus_musculus	232	GFQEAALKD-YDYNCFFFSVDVLIPIIDRNAYCFQSOP-RHFSVAMDKFGSLPYVQYFGG
Cricetulus_griseus	226	GFQEAALKD-HDYNCFFFSVDVLIPIIDRNAYCFQSOP-RHFSVAMDKFGSLPYVQYFGG
Homo_sapiens	231	GFQEAALKD-YDYTCFFFSVDVLIPIIDRNAYCFQSOP-RHFSVAMDKFGSLPYVQYFGG
Bos_taurus	235	GFKEALKD-YDYNCFFFSVDVLIPIIDRNAYCFQSOP-RHFSVAMDKFGSLPYVQYFGG
Gallus_gallus	194	GFTEALKD-YDYDCCFFFSVDVLIPIIDRNAYCFQSOP-RHFSVAMDKFGSLPYVQYFGG
Homo_sapiens_B4GALT2	198	GFTEALKD-DAAYDCFFFSVDVLIPIIDRNAYCFQSOP-RHFAAMDKFGSLPYVAGYFGG
Xenopus_laevis	179	GVKEALKD-EDYDCLFLHDVDLIPENDENLYVCDPWSF-RHFSVAMDKFGSLPYPMYFGG
Homo_sapiens_B4GALT3	178	GVKEALKD-EDYDCLFLHDVDLIPENDENLYVCDPWSF-RHFSVAMDKFGSLPYPMYFGG
Homo_sapiens_B4GALT4	177	GFTEALKD-EDYDCLFLHDVDLIPENDENLYVCDPWSF-RHFSVAMDKFGSLPYPMYFGG
Ciona_intestinalis	198	GFTEALKD-DDYDCCFFFSVDVLIPIIDRNAYCFQSOP-RHFSVAMDKFGSLPYPMYFGG
Homo_sapiens_B4GALT6	211	GFKEALKD-SVDYDCCFFFSVDVLIPIIDRNAYCFQSOP-RHFAAKDKMILPYKEFGG
Homo_sapiens_B4GALT5	217	GFQEAALKD-LDYDCLFLHDVDLIPENDENLYVCDPWSF-RHFAATDKMILPYKEFGG
Homo_sapiens_B4GALT7	148	GFTESSNS---TDYIAMHDVDLIPENDENLYVCDPWSF-RHFAATDKMILPYKEFGG

Mus_musculus	290	VSALSCKOQFALINGFPNNYWGCGEDDDIENRVHKGMSISRENVVGCGRMISHSRDKK
Cricetulus_griseus	284	VSALSCKOQFALINGFPNNYWGCGEDDDIENRVHKGMSISRENVVGCGRMISHSRDKK
Homo_sapiens	289	VSALSCKOQFALINGFPNNYWGCGEDDDIENRVHKGMSISRENVVGCGRMISHSRDKK

Bos_taurus 293 VSALSKQOFFSINGFPNNYWGCGGEDDDIENRFAFRGMSLRPNVVGICRMIEHSRDKK
 Gallus_gallus 252 VSALSKQOFFSINGFPNNYWGCGGEDDDIENRVFKGMGISRPDVEGICRMIEHSRDKK
 Homo_sapiens_B4GALT2 257 VSALSKQOFFSINGFPNNYWGCGGEDDDIENRSLTGMKISRPTIRIGVYRMIEHSDRDKK
 Xenopus_laevis 238 VSALTPFOYLLMNGFPNNYWGCGGEDDDIATRRLGGMKISRPSVSVGYIMVHKGDDG
 Homo_sapiens_B4GALT3 237 VSALTPFOYLLMNGFPNNYWGCGGEDDDIATRRLAGMKISRPTSVGYIMVHKGDDG
 Homo_sapiens_B4GALT4 235 VSALSRQOFFSINGFPNNYWGCGGEDDDIRLRRELQRMKISRPLPEVGYIMVHETRDKG
 Ciona_intestinalis 256 VIALMKQOFFACNGSNEYWGCGGEDDDIVRILHSCIGTERAQYDVAYRMAYHPSDKS
 Homo_sapiens_B4GALT6 269 VSGLTVQFRSINGFPNNYWGCGGEDDDIENRHYAGNMRPEEDCGYKSTPHHHRGE
 Homo_sapiens_B4GALT5 275 VSGLTVQFRSINGFPNNYWGCGGEDDDIENRQAGYSRPEEDTCYKSTPHHHRGE
 Homo_sapiens_B4GALT7 203 ELLLSKQHFRLCNGMSNRWGWGREDDFRRKKGAGQFRPSITTGVTTPFELHHPA

Mus_musculus 350 NEPNPQRFDRFAHTK--EIMRFDGLNSLYKVLDFQRYPLYTITVDIGTER-----
 Cricetulus_griseus 344 NEPNPQRFDRFAHTK--EIMRFDGLNSLYKVLDFQRYPLYTKITVDIGTER-----
 Homo_sapiens 349 NEPNPQRFDRFAHTK--EIMLSDGLNSLYKVLDFQRYPLYTITVDIGTER-----
 Bos_taurus 353 NEPNPQRFDRFAHTK--EIMLSDGLNSLYKVLDFQRYPLYTKITVDIGTER-----
 Gallus_gallus 312 NEPNPQRFDRFAHTK--EIMSSDGLNSLYKVLDFQRYPLYTITVDIGTER-----
 Homo_sapiens_B4GALT2 317 NEPNPQRFTHQNTK--LIMKRDGCGSRYQVLEDSQPLTNTITVDIGTERPSWPPRG--
 Xenopus_laevis 298 NEPNPQRFDLTIRIQ--RMWRVDGNSLNKGLARELEPLYTNITVDIGVDPRAKKALRN
 Homo_sapiens_B4GALT3 297 NEPNPQRFDLTIRIQ--RMWTODGNSLNKGLARELEPLYTNITVDIGTDPGRAPRPSG
 Homo_sapiens_B4GALT4 295 NEVNABRMKLEHQVS--RVWETDGLSSCKEESQENPLYINITVDIFWFGA-----
 Ciona_intestinalis 316 NRVNPYRNTLVGA--EIQSHDGLNNLHSLSEKTOLEPLYTNISADYCKEPLNPKTVGF
 Homo_sapiens_B4GALT6 329 VQFLG-RYKLEIRYSK--EIQYIDGLNNLIRPKIVD-RLYTNISVNMPELAPIEDY--
 Homo_sapiens_B4GALT5 335 VQFLG-RYALIRYSK--EIQGLDGLNNLIRFANITYD-ALYTNISVNMPELAQVNEY--
 Homo_sapiens_B4GALT7 263 WRKRDRIRIAAQEQQFQVDFEGCLNIRKHHVASRTALSFGAPCTVQNMIMLDCDKTATP

Mus_musculus -----
 Cricetulus_griseus -----
 Homo_sapiens -----
 Bos_taurus -----
 Gallus_gallus -----
 Homo_sapiens_B4GALT2 -----
 Xenopus_laevis 356 RGPTPPAISHYINTTKNTFADGGQIRNPADHPTNDSINEABLSAERRNKGPVVAPESTLA
 Homo_sapiens_B4GALT3 355 PRYPFGSSQAFRQEMLRPPARPGPLSTANHTALRGSH-----
 Homo_sapiens_B4GALT4 -----
 Ciona_intestinalis 374 GTGIDIVVSISLLLLMLTMCCTCVKSRLPHVLLCPRIIP-----
 Homo_sapiens_B4GALT6 -----
 Homo_sapiens_B4GALT5 -----
 Homo_sapiens_B4GALT7 323 WCTFS-----

Mus_musculus -----
 Cricetulus_griseus -----
 Homo_sapiens -----
 Bos_taurus -----
 Gallus_gallus -----
 Homo_sapiens_B4GALT2 -----
 Xenopus_laevis 416 EKLSLPMASAPHSAGGEDKQISVIRSMKDNNGNRVKEVQAHRVKKKSRVQRSSKLERQVE
 Homo_sapiens_B4GALT3 -----
 Homo_sapiens_B4GALT4 -----
 Ciona_intestinalis -----
 Homo_sapiens_B4GALT6 -----
 Homo_sapiens_B4GALT5 -----
 Homo_sapiens_B4GALT7 -----

Mus_musculus -----
 Cricetulus_griseus -----
 Homo_sapiens -----
 Bos_taurus -----
 Gallus_gallus -----
 Homo_sapiens_B4GALT2 -----
 Xenopus_laevis 476 LFGAEREKPKQDVGRSLPHLSRAPL
 Homo_sapiens_B4GALT3 -----
 Homo_sapiens_B4GALT4 -----
 Ciona_intestinalis -----
 Homo_sapiens_B4GALT6 -----
 Homo_sapiens_B4GALT5 -----
 Homo_sapiens_B4GALT7 -----

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